

# MNWR

MORBIDITY AND MORTALITY WEEKLY REPORT

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As part of its commemoration of CDC's 50th anniversary, MMWR is reprinting selected MMWR articles of historical interest to public health, accompanied by a current editorial note.

On June 4, 1981, MMWR published a report about Pneumocystis carinii pneumonia in homosexual men in Los Angeles. This was the first published report of what, a year later, became known as acquired immunodeficiency syndrome (AIDS). This report and current editorial note appear below.

# Pneumocystis Pneumonia — Los Angeles

In the period October 1980–May 1981, 5 young men, all active homosexuals, were treated for biopsy-confirmed *Pneumocystis carinii* pneumonia at 3 different hospitals in Los Angeles, California. Two of the patients died. All 5 patients had laboratory-confirmed previous or current cytomegalovirus (CMV) infection and candidal mucosal infection. Case reports of these patients follow.

Patient 1: A previously healthy 33-year-old man developed *P. carinii* pneumonia and oral mucosal candidiasis in March 1981 after a 2-month history of fever associated with elevated liver enzymes, leukopenia, and CMV viruria. The serum complement-fixation CMV titer in October 1980 was 256; in May 1981 it was 32.\* The patient's condition deteriorated despite courses of treatment with trimethoprim-sulfamethoxazole (TMP/SMX), pentamidine, and acyclovir. He died May 3, and post-mortem examination showed residual *P. carinii* and CMV pneumonia, but no evidence of neoplasia.

Patient 2: A previously healthy 30-year-old man developed *P. carinii* pneumonia in April 1981 after 5-month history of fever each day and of elevated liver-function tests, CMV viruria, and documented seroconversion to CMV, i.e., an acute-phase titer of 16 and a convalescent-phase titer of 28\* in anticomplement immunofluorescence tests. Other features of his illness included leukopenia and mucosal candidiasis. His pneumonia responded to a course of intravenous TMP/SMX, but, as of the latest reports, he continues to have a fever each day.

Patient 3: A 30-year-old man was well until January 1981 when he developed esophageal and oral candidiasis that responded to Amphotericin B treatment. He was hospitalized in February 1981 for *P. carinii* pneumonia that responded to oral TMP/SMX. His esophageal candidiasis recurred after the pneumonia was diagnosed,

<sup>\*</sup>Paired specimens not run in parallel.

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and he was again given Amphotericin B. The CMV complement-fixation titer in March 1981 was 8. Material from an esophageal biopsy was positive for CMV.

Patient 4: A 29-year-old man developed *P. carinii* pneumonia in February 1981. He had had Hodgkins disease 3 years earlier, but had been successfully treated with radiation therapy alone. He did not improve after being given intravenous TMP/SMX and corticosteroids and died in March. Postmortem examination showed no evidence

of Hodgkins disease, but P. carinii and CMV were found in lung tissue.

Patient 5: A previously healthy 36-year-old man with a clinically diagnosed CMV infection in September 1980 was seen in April 1981 because of a 4-month history of fever, dyspnea, and cough. On admission he was found to have *P. carinii* pneumonia, oral candidiasis, and CMV retinitis. A complement-fixation CMV titer in April 1981 was 128. The patient has been treated with 2 short courses of TMP/SMX that have been limited because of a sulfa-induced neutropenia. He is being treated for candidiasis with topical nystatin.

The diagnosis of *Pneumocystis* pneumonia was confirmed for all 5 patients antemortem by closed or open lung biopsy. The patients did not know each other and had no known common contacts or knowledge of sexual partners who had had similar illnesses. The 5 did not have comparable histories of sexually transmitted disease. Four had serologic evidence of past hepatitis B infection but had no evidence of current hepatitis B surface antigen. Two of the 5 reported having frequent homosexual contacts with various partners. All 5 reported using inhalant drugs, and 1 reported parenteral drug abuse. Three patients had profoundly depressed *in vitro* proliferative responses to mitogens and antigens. Lymphocyte studies were not performed on the other 2 patients.

Reported by MS Gottlieb, MD, HM Schanker, MD, PT Fan, MD, A Saxon, MD, JD Weisman, DO, Div of Clinical Immunology-Allergy, Dept of Medicine, UCLA School of Medicine; I Pozalski, MD, Cedars-Mt. Sinai Hospital, Los Angeles; Field Services Div, Epidemiology Program Office, CDC.

Editorial Note: Pneumocystis pneumonia in the United States is almost exclusively limited to severely immunosuppressed patients (1). The occurrence of pneumocystosis in these 5 previously healthy individuals without a clinically apparent underlying immunodeficiency is unusual. The fact that these patients were all homosexuals suggests an association between some aspect of a homosexual lifestyle or disease acquired through sexual contact and Pneumocystis pneumonia in this population. All 5 patients described in this report had laboratory-confirmed CMV disease or virus shedding within 5 months of the diagnosis of Pneumocystis pneumonia. CMV infection has been shown to induce transient abnormalities of in vitro cellular-immune function in otherwise healthy human hosts (2,3). Although all 3 patients tested had abnormal cellular-immune function, no definitive conclusion regarding the role of CMV infection in these 5 cases can be reached because of the lack of published data on cellular-immune function in healthy homosexual males with and without CMV antibody. In 1 report, 7 (3.6%) of 194 patients with pneumocystosis also had CMV infection; 40 (21%) of the same group had at least 1 other major concurrent infection (1). A high prevalence of CMV infections among homosexual males was recently reported: 179 (94%) of 190 males reported to be exclusively homosexual had serum antibody to CMV, and 14 (7.4%) had CMV viruria; rates for 101 controls of similar age who were reported to be exclusively heterosexual were 54% for seropositivity and zero for viruria (4). In another study of 64 males, 4 (6.3%) had positive tests for CMV in semen,

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but none had CMV recovered from urine. Two of the 4 reported recent homosexual contacts. These findings suggest not only that virus shedding may be more readily detected in seminal fluid than in urine, but also that seminal fluid may be an important vehicle of CMV transmission (5).

All the above observations suggest the possibility of a cellular-immune dysfunction related to a common exposure that predisposes individuals to opportunistic infections such as pneumocystosis and candidiasis. Although the role of CMV infection in the pathogenesis of pneumocystosis remains unknown, the possibility of *P. carinii* infection must be carefully considered in a differential diagnosis for previously healthy homosexual males with dyspnea and pneumonia.

#### References

- Walzer PD, Perl DP, Krogstad DJ, Rawson PG, Schultz MG. Pneumocystis carinii pneumonia in the United States. Epidemiologic, diagnostic, and clinical features. Ann Intern Med 1974;80:83–93.
- Rinaldo CR, Jr, Black PH, Hirsch MS. Interaction of cytomegalovirus with leukocytes from patients with mononucleosis due to cytomegalovirus. J Infect Dis 1977;136:667–78.
- Rinaldo CR, Jr, Carney WP, Richter BS, Black PH, Hirsch MS. Mechanisms of immunosuppression in cytomegaloviral mononucleosis. J Infect Dis 1980;141:488–95.
- Drew WL, Mintz L, Miner RC, Sands M, Ketterer B. Prevalence of cytomegalovirus infection in homosexual men. J Infect Dis 1981;143:188–92.
- Lang DJ, Kummer JF. Cytomegalovirus in semen: observations in selected populations. J Infect Dis 1975;132:472–3.

Editorial Note—1996: The June 4, 1981, report of five cases of *Pneumocystis carinii* pneumonia (PCP) in homosexual men in Los Angeles was the first published report about acquired immunodeficiency syndrome (AIDS). This report in *MMWR* alerted the medical and public health communities 4 months before the first peer-reviewed article was published (1).

The timeliness of this report can be credited to the public health sensitivity of the astute reporting physicians and the diligence of CDC staff. Dr. Gottlieb and his colleagues at the University of California at Los Angeles School of Medicine and Cedars-Mt. Sinai Hospital worked closely with the CDC Epidemic Intelligence Service Officer assigned to the Los Angeles Department of Health Services to summarize the data and draft this brief report. When news of these cases reached CDC, scientists in the Parasitic Diseases Division of CDC's Center for Infectious Diseases already were concerned about other unusual cases of PCP. That division housed the Parasitic Diseases Drug Service and requests for pentamidine isethionate to treat PCP in other similar patients in New York had been called to the attention of these scientists by the CDC employee who administered the distribution of this drug (which was not yet licensed and was available in the United States only from CDC).

In July 1981, following the report of these cases of PCP and cases of other rare life-threatening opportunistic infections and cancers (2), CDC formed a Task Force on Kaposi's Sarcoma and Opportunistic Infections. A key first task facing CDC was to develop a case definition for this condition and to conduct surveillance. The CDC case definition was adopted quickly worldwide. Results from active surveillance conducted in the United States rapidly established that the syndrome was new, and the number of cases was increasing rapidly (3). By the end of 1982, the distribution pattern of cases strongly suggested that AIDS was caused by an agent transmitted through sexual contact between men (4,5) and between men and women (6,7) and transmitted

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through blood among injecting-drug users and among recipients of blood or blood products (8–10). Cases also were identified among infants born to women with AIDS or at risk for AIDS (11), and the epidemic extended beyond the life-threatening reported cases to include persistent unexplained lymphadenopathy (12).

To prevent transmission of AIDS, in 1983 the Public Health Service used epidemiologic information about the condition to recommend that sexual contact be avoided with persons known or suspected to have AIDS and that persons at increased risk for AIDS refrain from donating plasma or blood (10,13). In addition, work was intensified toward developing safer blood products for persons with hemophilia. These recommendations were developed and published only 21 months after the first cases were reported and well before the first published reports identifying what is now termed HIV as the etiologic agent of AIDS (14,15). Isolation of HIV enabled development of assays to diagnose infections; characterization of the natural history of HIV; further protection of the blood supply; development of specific antiviral therapies; and expansion of surveillance criteria to include other conditions indicative of severe HIV disease. Research and prevention programs for HIV have contributed greatly to scientific and programmatic approaches to other public health problems.

During 1981–1996, approximately 350 reports related to AIDS were published in *MMWR*, an average of two per month since June 1981. Throughout the HIV epidemic, timely publication of reports about AIDS and related topics in *MMWR* have continued to play a crucial role in alerting health professionals and the public.

In 1996, HIV transmission occurs worldwide and has an impact in all countries (16). In the United States, prevention efforts have been successful at reducing HIV transmission. For example, blood-donor deferral and blood screening have virtually eliminated HIV transmission through blood and blood products, and adoption of less risky behaviors has greatly reduced sexual transmission between men; most recently, therapeutic advances have reduced transmission from mother to newborn (17). However, in the United States, AIDS has been diagnosed in 548,000 persons, and 343,000 have died. HIV infection has become the leading cause of death for persons aged 25–44 years, and an estimated 650,000–950,000 persons are living with HIV infection. Throughout the world, HIV continues to spread rapidly, especially in impoverished populations in Africa, Asia, and South and Central America. The emergence of the HIV pandemic demonstrates the vulnerability of the world's populations to previously unknown infectious diseases.

The first 15 years in the recorded history of AIDS have included remarkable scientific successes and countless examples of individual courage and accomplishment. Although these accomplishments provide hope for the future, further efforts are needed to halt the steady spread of HIV throughout the world.

Editorial Note by: James W. Curran, M.D., Dean, Rollins School of Public Health of Emory University (Atlanta); Coordinator of the 1981 Task Force on Kaposi's Sarcoma and Opportunistic Infections; and former Director of the Office of HIV/AIDS, CDC.

#### Deference

- Hymes KB, Cheung T, Greene JB, et al. Kaposi's sarcoma in homosexual men: a report of eight cases. Lancet 1981;2:598–600.
- CDC. Kaposi's sarcoma and Pneumocystis pneumonia among homosexual men—New York City and California. MMWR 1981;30:305–8.

#### Pneumonia — Continued

- CDC Task Force on Kaposi's Sarcoma and Opportunistic Infections. Epidemiologic aspects
  of the current outbreak of Kaposi's sarcoma and opportunistic infections. N Engl J Med
  1982;306:248–52.
- CDC. A cluster of Kaposi's sarcoma and Pneumocystis carinii pneumonia among homosexual male residents of Los Angeles and Orange counties, California. MMWR 1982;31:305–7.
- Jaffe HW, Choi K, Thomas PA, et al. National case-control study of Kaposi's sarcoma and Pneumocystis carinii pneumonia in homosexual men: part 1, epidemiologic results. Ann Intern Med 1983:99:145–51.
- CDC. Immunodeficiency among female sexual partners of males with acquired immune deficiency syndrome (AIDS)—New York. MMWR 1983;31:697–8.
- Harris C, Śmall CB, Klein RS, et al. Immunodeficiency in female sexual partners of men with the acquired immunodeficiency syndrome. N Engl J Med 1983;308:1181–4.
- CDC. Pneumocystis carinii pneumonia among persons with hemophilia A. MMWR 1982;31:365–7.
- CDC. Possible transfusion-associated acquired immune deficiency syndrome (AIDS)— California. MMWR 1982;31:652–54.
- CDC. Acquired immune deficiency syndrome (AIDS): precautions for clinical and laboratory staffs. MMWR 1982;31:577–80.
- CDC. Unexplained immunodeficiency and opportunistic infections in infants—New York, New Jersey, and California. MMWR 1982;31:665–7.
- CDC. Persistent, generalized lymphadenopathy among homosexual males. MMWR 1982;31: 249–51.
- CDC. Prevention of acquired immune deficiency syndrome (AIDS): report of inter-agency recommendations. MMWR 1983;32:101–3.
- Barre-Sinoussi F, Chermann JC, Rey F, et al. Isolation of a T-lymphotropic retrovirus from a patient at risk for acquired immune deficiency syndrome (AIDS). Science 1983;220:868–71.
- Gallo RC, Salahuddin SZ, Popovic M, et al. Frequent detection and isolation of cytopathic retroviruses (HTLV-III) from patients with AIDS and at risk for AIDS. Science 1984;224:500–3.
- 16. Mann J, Tarantela D, eds. AIDS in the world II. New York: Oxford University Press, 1996.
- CDC. Recommendations of the U.S. Public Health Service Task Force on the Use of Zidovudine to Reduce Perinatal Transmission of Human Immunodeficiency Virus. MMWR 1994;43(no. RR-11).

# HIV Testing Among Women Aged 18–44 Years — United States, 1991 and 1993

Human immunodeficiency virus (HIV) infection is a major cause of morbidity and mortality among women and children in the United States. In 1995, of the 73,380 acquired immunodeficiency syndrome (AIDS) cases reported, women accounted for 13,764 (19%) (1). HIV infection is the third leading cause of death among all U.S. women aged 25–44 years and the leading cause of death among black women in this age group (2). Moreover, an estimated 7000 infants are born to HIV-infected women in the United States each year (3); without intervention, approximately 15%–30% of these infants would be infected (4). HIV counseling and testing services are important for women to reduce their risk for becoming infected or, if already infected, to initiate early treatment and prevent HIV transmission to others, including their infants. This report summarizes findings about HIV-testing practices for women aged 18–44 years based on data obtained from CDC's 1991 and 1993 AIDS Knowledge and Attitudes Supplements to the National Health Interview Survey (NHIS-AIDS), which indicate that approximately one third of women aged 18–44 years have been tested for HIV.

The NHIS is an annual national probability sample of the civilian household population of the United States. Data about HIV testing have been collected annually as

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part of the NHIS-AIDS Supplement since 1987. Information about a broad range of issues related to HIV infection and AIDS was collected through personal interview with one randomly selected adult (aged ≥18 years) per household. Response rates for the 1991 and 1993 NHIS-AIDS were 86% and 80%, respectively. Information about voluntary HIV-testing practices was analyzed for women aged 18–44 years who responded to the survey; women who had HIV tests at the time of blood donation were excluded. Because interviews for the 1993 NHIS-AIDS were conducted only for 6 months, the number of responses from women in this age group is smaller (n=6267) than in 1991 (n=13,411). All data were analyzed using SUDAAN and weighted to produce national estimates.

Although the 1993 NHIS-AIDS provides the most recent national data available about HIV testing,\* information about current or past pregnancies was collected only during 1991. However, because the number of pregnant women responding to the 1991 survey was too small for meaningful estimates of HIV testing, 1991 data were analyzed for the 30% of women (n=3996) who reported having had a live-born infant during the preceding 5 years.

#### Trends

In 1991, 18.8% of women aged 18–44 years reported having been tested for HIV antibody (Table 1). The proportion of black (25.7%) and Hispanic (27.5%) women who reported having been tested was substantially greater than that for white women (16.2%).† In addition, women with <12 years of education were more likely to report having ever been tested for HIV (25.1%) compared with high school graduates (17.2%) or those who had completed college (18.9%). A greater percentage of women living in poverty<sup>§</sup> reported having been tested for HIV (25.9%) compared with those at or above the poverty level (17.5%). Women who had been previously married were more likely to report having been tested (24.0%) than were those who were currently (18.4%) or never (17.4%) married. Nearly 40% of women who perceived a high or medium risk for becoming or being HIV-infected and 33.1% of those who reported any HIV risk behavior had been tested. ¶ Compared with women residing in non-metropolitan statistical areas (MSAs), women residing in central cities of MSAs were more likely to have been tested (18.1% and 20.5%, respectively); regionally, the highest rates of testing were for women residing in the South (20.6%) and West (22.2%).

From 1991 to 1993, the proportion of women aged 18–44 years who had ever been tested for HIV increased 60% (from 18.8% to 31.8%) (Table 1). Increases were similar across all sociodemographic groups. As in 1991, in the 1993 survey, higher percentages of black and Hispanic women (46.1% and 39.7%, respectively) compared with white women (27.9%) reported having been tested for HIV. Similarly, a higher proportion of women with <12 years of education reported having been tested for HIV

<sup>\*</sup>Data about HIV testing and other AIDS-related knowledge and attitudes were collected in 1994 and 1995; however these data are not yet available for analysis.

<sup>&</sup>lt;sup>†</sup>Numbers for other racial groups were too small for meaningful analysis.

<sup>&</sup>lt;sup>5</sup> Poverty statistics are based on a definition originated by the Social Security Administration in 1964, that was subsequently modified by federal interagency committees in 1969 and 1980, and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.

Respondents were asked whether they 1) had hemophilia or other clotting disorder and had received clotting concentrations since 1977; 2) had injected illegal drugs at any time since 1977; 3) had exchanged sex for money or drugs since 1977; and 4) had been the sex partner since 1977 of someone to whom any of these conditions applied.

HIV Testing Among Women — Continued

TABLE 1. Percentage of women aged 18–44 years who reported having ever been tested for HIV antibody, by selected characteristics and year — United States, National Health Interview Survey of AIDS Knowledge and Attitudes, 1991 and 1993

	(1	1991 n=13,411)		1991* (n=3,996)		1993 (n=6,267)
Characteristic	% Tested	(95% CI <sup>†</sup> )	% Tested	(95% CI)	% Tasted	(95% CI)
Race/Ethnicity <sup>§</sup>						
White, non-Hispanic	16.2	(15.3%-17.1%)	22.2	(20.3%-24.1%)	27.9	(26.3%-29.5%)
Black, non-Hispanic	25.7	(23.3%-28.1%)	33.4	(29.4%-37.4%)	46.1	(42.4%-49.8%)
Hispanic	27.5	(23.9%-31.1%)	35.0	(28.8%-41.2%)	39.7	(35.0%-44.4%)
Education (yrs)						
<12	25.1	(22.4%-27.8%)	34.0	(29.3%-38.7%)	36.9	(32.5%-41.3%)
12	17.2	(16.0%-18.4%)		(23.0%-28.0%)		(29.2%-33.8%)
13-15	17.5	(16.1%-18.9%)		(18.8%-24.6%)		(29.1%-32.7%)
≥16	18.9	(17.3%-20.5%)		(19.3%-25.9%)		(27.8%-33.0%)
Poverty level1						
At or above	17.5	(16.6%-18.4%)	23.2	(21.4%-25.0%)	30.3	(28.7%-31.9%)
Below	25.9	(23.1%-28.7%)		(31.3%-41.1%)		(36.4%-44.0%)
Unknown	18.9	(15.8%-22.0%)		(20.3%-33.1%)		(24.7%-34.7%)
Marital status	10.0	(10.070 22.070)	20.7	(20.070 00.170)	20.7	(24.770 04.770)
	18.4	(17.3%-19.5%)	24.1	(22.1%-26.1%)	31.4	(29.5%-33.3%)
Married	24.0	(21.9%-28.6%)		(27.1%-26.1%)		(37.0%-43.6%)
Previously married Never married	17.4	(15.8%-19.0%)		(28.0%-37.0%		(26.1%-31.1%)
Residence				,		,,
MSA**-central city	20.5	(19.3%-21.7%)	26.7	(24.3%-29.1%	36.6	(34.3%-38.9%)
MSA-noncentral city	19.3	(17.3%-21.3%		(23.4%-32.0%		(27.1%-32.9%)
Non-MSA	18.1	(14.6%-21.6%)		(19.8%-34.2%		(21.7%-34.5%)
Region <sup>††</sup>						
Northeast	14.8	(13.2%-16.4%)	19.2	(16.2%-22.2%	26.7	(24.1%-29.3%)
Midwest	16.1	(14.7%-17.5%)		(18.3%-25.1%		(23.4%-28.6%)
South	20.6	(18.6%-22.6%		(27.1%-34.3%		(34.4%-39.8%)
West	22.2	(20.3%-24.1%		(24.2%-31.3%		(31.5%-37.9%)
Perceived risk of getting or having HIV						
High or medium	39.6	(35.2%-44.0%	41.0	(31.4%-50.6%	) 40.1	(34.9%-45.3%)
Low or none	17.8	(16.9%-18.7%		(23.4%-27.0%	31.0	(29.5%-32.5%
Reported any HIV risk behavior since 1977						
Yes	33.1	(27.7%-38.5%		(39.2%-55.2%		(48.7%-62.3%
No	18.3	(17.4%-19.2%	24.8	(23.0%-26.6%	30.6	(29.1%-32.1%
Total	18.8	(17.8%-19.7%	25.7	(23.9%-27.5%	31.8	(30.3%-33.3%

<sup>\*</sup>Women who reported having had a live-born infant during the 5 years preceding the survey 
†Confidence interval.

Numbers for other racial groups were too small for meaningful analysis.

Proverty statistics are based on a definition originated by the Social Security Administration in 1964, that was subsequently modified by federal interagency committees in 1969 and 1980, and prescribed by the Office of Management and Budget as the standard to be used by federal agencies for statistical purposes.

<sup>\*\*</sup> Metropolitan statistical area.

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(36.9%) compared with high school graduates (31.5%) or those with college education (30.4%). In addition, more women living in poverty reported having been tested for HIV (40.2%) than did women living at or above the poverty level (30.3%). HIV-testing trends among women aged 18–44 years were similar to those in 1991 with respect to marital status, risk perception, and region of residence; however, the proportions of women tested in all three groups increased during 1991–1993 (Table 1). During 1991–1993, the proportion of women tested who had higher perceived risk for HIV did not increase; however, the proportion tested with low or no perceived risk nearly doubled.

## Women Who Had a Live-Born Infant During the Preceding 5 Years

In 1991, a higher proportion of women who reported having had a live-born infant during the preceding 5 years had been tested for HIV (25.7%) compared with all women aged 18–44 years (18.8%) (Table 1). Among women who reported a high or medium risk for becoming or being infected, percentages were similar for those who had had a live-born infant during the preceding 5 years (41.0%) and all women (39.6%). Among women who reported having had a live-born infant during the preceding 5 years, testing rates were highest among Hispanics (35.0%) and blacks (33.4%), women with <12 years of education (34.0%), and those living in poverty (36.2%). Approximately twice as many never-married women who reported having had a live-born infant during the preceding 5 years had been tested for HIV (32.5%), compared with all never-married women in this age group (17.4%).

Reported by: Div of Health Interview Statistics, National Center for Health Statistics, CDC.

Editorial Note: The findings in this report indicate that the proportion of women aged 18–44 years in the United States who reported being tested for HIV infection increased in the early 1990s. This trend may reflect increased knowledge and awareness about HIV and AIDS among women. However, the data in this report probably underestimate current rates of HIV testing in pregnant women because they do not reflect recent changes in testing practices and because testing among women who had a live-born infant during the preceding 5 years is not a good proxy for recent pregnancy. During the period of the surveys, prenatal HIV testing was targeted toward women known to be at increased risk for HIV infection (5). Since then, studies have indicated that such testing strategies failed to identify and offer services to many HIV-infected women (6,7). In 1995, based on these findings and advances in prevention and treatment for HIV infection, including zidovudine therapy to reduce perinatal HIV transmission, the Public Health Service issued recommendations for universal HIV counseling and voluntary testing for pregnant women (4).

The higher rates of testing among poor, less educated minority women may reflect trends in related factors, such as the use of sexually transmitted disease and family-planning clinics as a primary source of health care. In the survey, clinics were a primary site of HIV testing for lower-income minority women. The higher rates of testing among black and Hispanic women also reflect trends in the incidence of AIDS cases in the United States. In particular, the incidence of AIDS among women and minorities has not declined as it has among white males (8). Poor access to medical care, high rates of sexually transmitted diseases, and other sociodemographic characteristics continue to be associated with increased risk for infection among minority women. Reducing the risk for HIV infection and AIDS will require culturally appropriate HIV-

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prevention interventions that address the particular concerns of black and Hispanic women (9,10).

Congress recently passed legislation stating that HIV counseling and voluntary testing should be the standard of care for all pregnant women in the United States\*\*. Surveys such as the NHIS-AIDS and other studies will provide important data to help public health and other health-care professionals evaluate the extent of implementation of this prevention measure and its impact on reducing HIV-related morbidity and mortality among women and children.

#### References

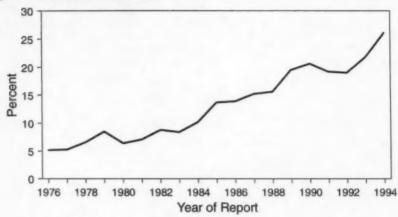
- CDC. HIV/AIDS surveillance report, 1995. Atlanta: US Department of Health and Human Services, Public Health Service, 1996. (Vol. 7, no. 2).
- CDC. Update: mortality attributable to HIV infection among persons aged 25–44 years—United States, 1994. MMWR 1996;45:121–5.
- Davis SF, Byers RH, Lindegren ML, Caldwell MB, Karon JM, Gwinn M. Prevalence and incidence
  of vertically acquired HIV infection in the United States. JAMA 1995:274:952–5.
- CDC. U.S. Public Health Service recommendations for human immunodeficiency virus counseling and voluntary testing for pregnant women. MMWR 1995;44(no. RR-7).
- CDC. Recommendations for assisting in the prevention of the perinatal transmission of human T-lymphotropic virus type III/lymphadenopathy-associated virus and acquired immunodeficiency syndrome. MMWR 1985;34:721–32.
- Barbacci MB, Dalabetta GA, Repke JT, et al. Human immunodeficiency virus infection in women attending an inner-city prenatal clinic: ineffectiveness of targeted screening. Sex Transm Dis 1990;17:122–6.
- Fehrs LJ, Hill D, Kerndt PR, Rose TP, Henneman C. Targeted HIV screening at a Los Angeles prenatal/family planning health center. Am J Public Health 1991;81:619–22.
- 8. Rosenberg PS. Scope of the AIDS epidemic in the United States. Science 1995;270:1372-5.
- Sikkema KJ, Koob JJ, Cargill VC, et al. Levels and predictors of HIV risk behavior among women in low-income public housing developments. Public Health Rep 1995:110:707–13.
- O'Donnell L, San Doval A, Vornfett R, O'Donnell CR. STD prevention and the challenge of gender and cultural diversity: knowledge, attitudes, and risk behaviors among black and Hispanic inner-city STD clinic patients. Sex Transm Dis 1994;21:137–48.

# Outbreaks of Salmonella Serotype Enteritidis Infection Associated with Consumption of Raw Shell Eggs — United States, 1994–1995

Salmonella serotype Enteritidis (SE) accounts for an increasing proportion of all Salmonella serotypes reported to CDC's National Salmonella Surveillance System. During 1976–1994, the proportion of reported Salmonella isolates that were SE increased from 5% to 26% (Figure 1). During 1985–1995, state and territorial health departments reported 582 SE outbreaks, which accounted for 24,058 cases of illness, 2290 hospitalizations, and 70 deaths. This report describes four SE outbreaks during 1994–1995 associated with consumption of raw shell eggs (i.e., unpasteurized eggs) and underscores that outbreaks of egg-associated SE infections remain a public health problem.

<sup>\*\*</sup>Public Law 101-545.

FIGURE 1. Percentage of all Salmonella isolates that were serotype Enteritidis, by year — United States, 1976–1994



# Washington, D.C.

In August 1994, a total of 56 persons who ate at a Washington, D.C., hotel had onset of diarrhea; 20 persons were hospitalized. *Salmonella* group D was isolated from stools of the 29 patrons who submitted specimens; 27 of the 29 isolates further typed were identified as SE.

An investigation by the District of Columbia Commission of Public Health (DCCPH) involved 41 ill patrons and 23 well patrons who had eaten brunch at the hotel on August 28. A case was defined as onset of diarrheal illness in a person who ate brunch at the hotel on August 28. All 39 patrons who had eaten hollandaise sauce became ill, compared with two (8%) of 25 persons who had not eaten the sauce (odds ratio [OR]=undefined; lower 95% confidence limit=52; p=<0.01).

Cultures of the sauce served on August 28 yielded SE. Of the 11 isolates tested (10 obtained from ill persons and one from the sauce), all were phage type 8. Cultures of pooled whole raw shell eggs, egg whites, and raw shell eggs from the same shipment as the implicated eggs did not yield Salmonella.

The hollandaise sauce was prepared on August 28 by hand-cracking and pooling the egg yolks from 36 extra-large grade A raw shell eggs. Lemon juice, melted butter, salt, and pepper were added to the egg yolk mixture while heating over a hot water bath. After preparation, the sauce was held in a hot water bath at an estimated temperature of 100 F–120 F (38 C–49 C) for 9 hours while being served.

Traceback of the implicated eggs by DCCPH, the Maryland Veterinary Service, and the U.S. Department of Agriculture's (USDA's) Animal and Plant Health Inspection Service (APHIS) identified two flocks in Pennsylvania as possible sources for the eggs.

## Indiana

In June 1995, approximately 70 residents and staff of a nursing home in Indiana had onset of diarrhea and abdominal cramps. Stool cultures from symptomatic resi-

dents and staff yielded 39 confirmed cases of SE. The one isolate tested was phage type 13A. Three residents died from complications of SE infection.

An investigation by the Indiana State Department of Health and the Vanderburgh County Health Department involved seven of the initial 18 case-patients and 13 well residents. A case was defined as diarrheal illness in a nursing home resident with onset on June 9. Six (86%) of the seven patients had eaten baked eggs for breakfast on June 7, compared with three (23%) of 13 well persons (OR=16.5; 95% Cl=1.3–1009; p=0.02).

The baked eggs were prepared by hand-cracking and pooling 180 medium grade A raw shell eggs, mixing the eggs with a hand whisk, and baking them in a single 8-inch deep pan at 400 F (204 C) for 45 minutes–1 hour. The eggs were then placed on a steam table where an internal temperature was obtained and reported in a chart log. Although recorded internal temperatures of eggs prepared during June ranged from 180 F–200 F (82 C–93 C), inadequate cooking may have contributed to the outbreak because the eggs were not stirred while being baked, and the internal temperature was obtained from only one place in the pan. The eggs were served within 30 minutes after cooking.

At the time of the investigation, none of the prepared eggs or raw shell eggs from the same shipment were available for testing. APHIS traced the implicated eggs to a distributor who received eggs from at least 35 different flocks.

## Greenport, New York

On June 24, 1995, a total of 76 persons attended a catered wedding reception. Following the reception, attendees contacted the local health department to report onset of a gastrointestinal illness. *Salmonella* group D was isolated from stools of the 13 persons who submitted specimens; 11 of the 13 isolates further typed were identified as SE.

An investigation by the Suffolk County Health Department involved the 28 ill attendees and the 12 well attendees that were contacted. A case was defined as onset of diarrheal illness in an attendee of the reception. Twenty-six (93%) of 28 persons who had eaten Caesar salad became ill, compared with two (17%) of 12 persons who had not eaten the salad, (OR=52; 95% Cl=6.2-849; p=<0.01).

The Caesar salad dressing was prepared with 18 raw shell eggs, olive oil, lemon juice, anchovies, Romano cheese, and Worcestershire sauce at 11:30 a.m. on June 24. The mixture was held unrefrigerated at the catering establishment for 2 hours, then placed in an unrefrigerated van until delivered and served at the reception at 6 p.m.

A traceback by the New York State Department of Agriculture and Markets (NYSDAM) identified the source of the eggs as a producer/distributor in Pennsylvania who received and commingled eggs from at least five flocks.

## **New York City**

On July 23, 1995, three persons who lived in the same household drank a home-made beverage known as "Jamaican malt" and had onset of diarrhea, vomiting, and abdominal cramps; two were hospitalized. The mean period from consumption to onset of illness was 7.6 hours (range: 5.5–10.5 hours). Stool cultures from all three persons yielded SE.

The beverage was prepared at home the evening of July 22 by mixing beer, refrigerated raw shell eggs, sweetened condensed milk, oatmeal, and ice. Two patients

drank the beverage immediately after preparation, and the third drank it 5 hours later. The beverage had been refrigerated after preparation.

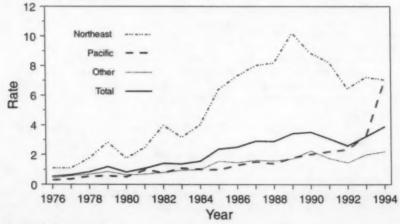
Cultures of the leftover beverage, raw eggs from the same carton used to prepare the drink, and leftover egg shells from the eggs used to prepare the drink all yielded SE. Isolates from the one patient tested and all three food samples were phage type 13A.

Traceback of the implicated eggs by NYSDAM identified a single flock in Pennsylvania. At the recommendation of the Pennsylvania Department of Health, eggs from the implicated flock were diverted to a pasteurization plant.

Reported by: M Levy, MD, M Fletcher, PhD, M Moody, MS, Bur of Epidemiology and Disease Control, District of Columbia Commission of Public Health. D Cory, W Corbitt, MS, C Borowiecki, D Gries, J Heidingsfelder, MD, Vanderburgh County Health Dept, Evansville; A Oglesby, MPH, J Butwin, MSN, D Ewert, MPH, D Bixler, MD, B Barrett, K Laurie, E Muniz, MD, G Steele, DrPH, State Epidemiologist, Indiana State Dept of Health. A Baldonti, MD, Albert Einstein College of Medicine, New York City; B Williamson, Suffolk County Health Dept, Hauppauge; M Layton, MD, Bur of Communicable Disease Control, L Kornstein, PhD, Bur of Laboratories, E Griffin, Bur of Environmental Investigation, New York City Health Dept; M Cambridge, N Fogg, J Guzewich, Bur of Community Sanitation and Food Protection, T Root, Wadsworth Center for Laboratories and Research, D Morse, MD, State Epidemiologist, New York State Dept of Health; J Wagoner, New York State Dept of Agriculture and Markets. M Deasey, Div of Epidemiology, Pennsylvania Dept of Health; K Miller, Pennsylvania Dept of Agriculture. Animal and Plant Health Inspection Service, Food Safety and Inspection Service, US Dept of Agriculture. Food and Drug Administration. Foodborne and Diarrheal Diseases Br, Div of Bacterial and Mycotic Diseases, National Center for Infectious Diseases. CDC.

Editorial Note: During 1976–1994, rates of isolation of SE increased in the United States from 0.5 to 3.9 per 100,000 population (Figure 2). Two important factors probably contributed to the increase in 1994: 1) the effect of an outbreak of SE infections associated with a nationally distributed ice cream product (1) and 2) the expansion of the SE epidemic into California. During 1990–1994, the SE isolation rate for the Northeast region decreased from 8.9 to 7.0 per 100,000 population; the rate increased ap-

FIGURE 2. Rate\* of isolation of Salmonella serotype Enteritidis, by region and year — United States, 1976–1994



<sup>\*</sup>Per 100,000 population.

proximately threefold for the Pacific region (Figure 2). This increase was primarily associated with reports from California, where the percentage of *Salmonella* isolates that were SE increased from 11% in 1990 to 38% in 1994. In 1994, 24% of all SE isolates in the United States were from California. In the United States, both sporadic and outbreak-associated cases of SE infection frequently have been associated with consumption of raw or undercooked shell eggs (2–4).

The findings in this report illustrate that outbreaks of egg-associated SE infections remain a public health problem in commercial food-service establishments, institutional facilities, and private homes throughout the United States. However, the risk for SE infection in humans can be reduced through public health prevention efforts (see box) (5).

In 1994, no reported deaths resulted from SE outbreaks in the United States; however, in 1995, five deaths were associated with SE outbreaks, including the three in Indiana described in this report. One possible explanation for the lack of deaths in 1994 is that no nursing home outbreaks were reported that year; four of the five reported deaths in 1995 occurred among nursing home residents. During 1985–1991, a total of 59 SE outbreaks occurred in hospitals or nursing homes, accounting for only 12% of all outbreak-associated cases but 90% of all deaths. The case-fatality rate in these institutions was 70 times higher than in outbreaks in other settings (4). This underscores the importance of using pasteurized egg products for all recipes requiring pooled, raw, or undercooked shell eggs for the institutionalized elderly and other high-risk populations.

In 1990, USDA initiated a mandatory program to test for SE in breeder flocks that produce egg-laying chickens. In addition, USDA traced the eggs implicated in human foodborne SE outbreaks back to the farm of origin and, when feasible, conducted serologic and microbiologic assessments of the farm. If SE was detected at the source farm, the eggs were diverted to pasteurization. Funding for this program was discontinued effective October 1, 1995. As a result, these efforts are conducted by the Food

# Recommendations for Preventing Salmonella Serotype Enteritidis Infections Associated with Eggs

- Consumption of raw or undercooked eggs should be avoided, especially by immunocompromised or other debilitated persons.
- In hospitals, nursing homes, and commercial kitchens, pooled eggs or raw or undercooked eggs should be substituted with pasteurized egg products.
- Eggs should be cooked at ≥145 F (≥63 C) for ≥15 seconds (until the white is completely set and the yolk begins to thicken) and eaten promptly after cooking.
- Hands, cooking utensils, and food-preparation surfaces should be washed with soap and water after contact with raw eggs.
- Eggs should be purchased refrigerated and stored refrigerated at ≤41 F (≤5 C) at all times.
- Flock-based egg-quality-assurance programs that meet national standards and include microbiologic testing should be adopted by industry nationwide.

and Drug Administration, which has regulatory authority for shell eggs in interstate commerce.

Further control of SE will require limiting the spread of SE on farms. In 1992, USDA, in collaboration with the industry, academia, and the Pennsylvania Department of Agriculture (PDA), initiated a flock-based intervention program, the Pennsylvania Pilot Project (6), which evolved in 1994 into the current Pennsylvania Egg Quality Assurance Program (PEQAP). USDA provided oversight for PEQAP until June 30, 1996, when the program was transferred to PDA and the industry. This prevention program uses many of the on-farm microbiologic testing and control procedures developed in the pilot project to reduce SE contamination of eggs. The decrease in SE infections in the Northeast may reflect the collaborative prevention efforts in that region; similar efforts may be necessary to control the problem elsewhere in the country.

#### References

 Hennessy TW, Hedberg CW, Slutsker L, et al. A national outbreak of Salmonella enteritidis infections from ice cream. N Engl J Med 1996; 334:1281-6.

 St Louis ME, Morse DL, Potter ME, et al. The emergence of grade A eggs as a major source of Salmonella enteritidis infections: new implications for the control of salmonellosis. JAMA 1988; 259:2103–7.

 Hedberg CW, David MJ, White KE, MacDonald KL, Osterholm MT. Role of egg consumption in sporadic Salmonella enteritidis and Salmonella typhimurium infections in Minnesota. J Infect Dis 1993;167:107–11.

 Mishu B, Koehler J, Lee LA, et al. Outbreaks of Salmonella enteritidis infections in the United States, 1985–1991. J Infect Dis 1994;169:547–52.

 Food and Drug Administration. Food code: 1995 recommendations of the United States Public Health Service. Washington, DC: US Department of Health and Human Services, Public Health Service, Food and Drug Administration, 1995.

 Animal and Plant Inspection Service, US Department of Agriculture. Salmonella Enteritidis Pilot Project progress report, Washington, DC: US Department of Agriculture, 1995.

# Notice to Readers

# Final 1995 Reports of Notifiable Diseases

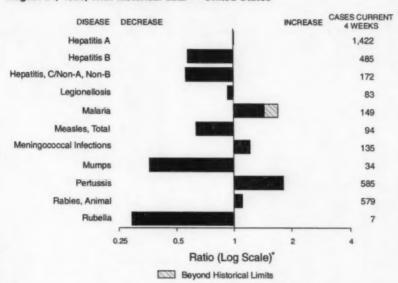
The notifiable diseases tables on pages 749–754 summarize final data for 1995. These data, final as of July 26, 1996, will be published in more detail in the MMWR Summary of Notifiable Diseases, United States, 1995 (1). Data in this summary were derived primarily from reports transmitted to CDC through the National Electronic Telecommunications System for Surveillance (NETSS). There were no reported cases of anthrax, diphtheria, and yellow fever in the United States during 1995; thus, these three nationally notifiable diseases do not appear in these tables.

Population estimates for the states are from the July 1, 1995, estimates by the U.S. Bureau of the Census, Population Division, Population Branch, press release CB96-10. Population estimates for territories are from the 1990 census, U.S. Bureau of the Census, press releases CB91-142, 242, 243, 263, and 276.

#### Reference

1. CDC. Summary of notifiable diseases, United States, 1995. MMWR 1995;45(in press).

FIGURE I. Selected notifiable disease reports, comparison of 4-week totals ending August 24, 1996, with historical data — United States



\*Ratio of current 4-week total to mean of 15 4-week totals (from previous, comparable, and subsequent 4-week periods for the past 5 years). The point where the hatched area begins is based on the mean and two standard deviations of these 4-week totals.

TABLE I. Summary — cases of selected notifiable diseases, United States. cumulative, week ending August 24, 1996 (34th Week)

	Cum. 1996		Cum. 1996
Anthrax		HIV infection, pediatric*5	170
Brucellosis	57	Plaque	
Cholera	2	Poliomyelitis, paralytic¶	
Congenital rubella syndrome	1	Psittacosis	25
Cryptosporidiosis*	1,164	Rabies, human	
Diphtheria	1	Rocky Mountain spotted fever (RMSF)	433
Encephalitis: California*	24	Streptococcal toxic-shock syndrome*	10
eastern equine*	24 2	Syphilis, congenital**	
St. Louis*		Tetanus	18 92 13
western equine*		Toxic-shock syndrome	92
Hansen Disease	69	Trichinosis	13
Hantavirus pulmonary syndrome*†	9	Typhoid fever	208

-: no reported cases

\*Not notifiable in all states.

Not notifiable in all states.
 Updated weekly from reports to the Division of Viral and Rickettsial Diseases, National Center for Infectious Diseases (NCID).
 Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (NCHSTP), last update July 30, 1996.
 Three suspected case of polio with onset in 1996 has been reported to date.
 \*\*Updated quarterly from reports to the Division of STD Prevention, NCHSTP.

TABLE II. Cases of selected notifiable diseases, United States, weeks ending August 24, 1996, and August 26, 1995 (34th Week)

	AID	8*	Chlamydia	eoli 01		Gener	rhea	Heps C/NA		Legione	rilosis
Reporting Area	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	39,982	45,902	214,804	1,409	660	182,944	253,359	2,196	2,576	516	775
NEW ENGLAND	1,589	2,205	11,121	205	48	4,673	4,901	76	83	29	18
Maine	29	75	594	16		33	56	*	-	2	5
N.H.	50	70 21	397	24 14	24	80 38	72	8	12	3	1
Vt. Mass.	740	998	4,306	98	10	1,413	1,752	36	50	15	10
R.L	113	165	1,299	10		334	325	6	4	8	2
Conn.	643	876	4,525	43	*	2,775	2,660		*	N	N
MID. ATLANTIC	11,159	12,421	27,478	118	34	20,427	29,232	187	296	113	129
Upstate N.Y.	1,378 6,277	1,609 6,550	12.837	79 7	12	4,017 6,455	6,105 11,525	152	146	44	33
N.Y. City N.J.	6,277 2,130	6,550 2,870	12,837	32	5	6,455 3,185	3,110		121	8	19
Pa.	1,374	1,392	11,864	N	17	6,770	8,492	34	28	56	74
E.N. CENTRAL	3,225	3,513	28,101	351	154	27,514	50,704	304	207	138	228
Ohio	696	723	12,840	89	44	9,341	16,215	24	7	58	107
Ind.	433	337	6,692	48	26	4,330	5,843	7	1 62	31	52
III. Mich.	1,397 528	1,511 712	2,982 U	153 61	16 48	11,146 U	12,746 11,560	47 226	62 137	31	21
Mich. Wis.	171	230	5,587	N	20	2,697	4,340	.20	1.07	9	26
W.N. CENTRAL	935	1,071	14,211	296	175	7,365	13,112	87	56	29	51
Minn.	170	242		116	105	U	1,890	1	2	3	
lowa	63	55	2,631	75	50	668	930	40	10	7	17
Mo. N. Dak	469	473	8,109	43	7	5,315	7,476	27	17	6	13
N. Dak. S. Dak.	10	11	704	12	-	101	136		1	2	
Nebr.	65	75	903	15	3	181	773	5	12	9	11
Kans.	150	211	2,765	26	10	1,281	1,889	14	10	2	7
S. ATLANTIC	9,735	11,571	35,227	76	40	63,042	69,853	165	163	90	122
Del.	193	219	1,148		1	952	1,414	1	-	8 17	2
Md. D.C.	1,149 638	1,614	4,217 N	N	6	8,831 2,982	7,929	1	6	17 B	22
Va.	647	932	7,094	N	19	6,029	7,111	9	9	13	16
W. Va.	73	63	1	N	2	335	470	8	40	1	2
N.C.	539	712		23	9	12,363	15,818	33	41	7	25
S.C. Ga.	1,421	1,461		6 22	3	7,010	7,953 12,856	21 U	15 15	4 3	14
Ga. Fla.	4,575	5,261				11,832	13,452	92	37	29	18
E.S. CENTRAL	1,311	1,500	19,263	36	29	20,528	26,534	401	721	33	48
Ky.	212	182	4,200	7	4	2,607	3,055	20	23	3	1
Tenn.	497	606	8,678	17	22	7,506	8,974	306	696	16	2
Ala. Miss.	365 237	410 302			3	8,809 1,607	10,988 3,517	71	2 U	3 11	10
W.S. CENTRAL	3,970	4,060			9	21,820	35,450	312	180	15	19
W.S. CENTRAL	3,970 170	185		- 11	3	2,337	3,386	6	5		
La.	923	651	4,611	5	3	4,956	7,678	135	113	1	
Okla.	165	173	5,009	8	1	3,152	3,560	69	31	4	
Tex.	2,712	3,051			2	11,375	20,827	102	31	10	
MOUNTAIN Mont.	1,198	1,466	10,278	107	53	4,682	5,886 43	382 12	307 10	28	8
Idaho	22 25	37	1,022		5	73	92	91	41	-	
Wyo.	3	10	378		2	21	37	124	121	3	
Colo.	335	493		- 41	24	1,077	1,888	35	46	7	3
N. Mex.	114	123 390			14	564 2,392	678 2,106		37 27	1 12	
Ariz. Utah	342 117	390				2,392			10	2	1
Nev.	240	299				332			15	2	1
PACIFIC	6,859	8,095	5 38,488	182	127	12,712	17,687	282	563	41	8
Wash.	447	662	6,177	7 54	42	1,342	1,706	39	144	5	1
Oreg.	311	285	5 U	J 51		361	490	4	33		
Calif.	5,964	6,913 53				10,484			367	32	5
Alaska Hawaii	16	182				275 250			18	3	
Guam	4	764	- 168	-		31			5	2	
P.R.	1,352	1,762	2 N	13	U	198			159	4	
V.I.	16			N N	U				-		
Amer. Samos				- N		11	18		5		
C.N.M.I.	1		- N	N N	U	9.0	39		-		

N: Not notifiable

U: Unavailable

-: no reported cases

C.N.M.I.: Commonwealth of Northern Mariana Islands

\*Updated monthly to the Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention, last update July 30, 1996.

\*National Electronic Telecommunications System for Surveillance.

\*Public Health Laboratory Information System.

TABLE II. (Cont'd.) Cases of selected notifiable diseases, United States, weeks ending August 24, 1996, and August 26, 1995 (34th Week)

	Lyr		Mal	aria	Mening: Dise		Sypi (Primary &		Tubero	ulosis	Rabies,	Animal
Reporting Area	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995
UNITED STATES	6,848	6,957	887	778	2,251	2,134	7,032	10,731	12,092	13,239	3,878	5,173
NEW ENGLAND	2,228	1,377	35	34	96	99	110	251	263	327	463	1,044
Maine	21	16	6	4	12	7		2	4	11	67	21
N.H. Vt.	21	19	1 2	1	3	16	1	1	8	9 2	110	113 128
Vt. Mass.	168	81	12	10	36	35	51	43	131	183	75	328
R.I.	304	225	6	3	10	4	1	2	24	29	32	211
Conn.	1,703	1,029	8	15	32	31	57	203	95	93	135	243
MID. ATLANTIC	3,967	4,554	215	213	201	277	281	559	2,212	2,816	475	1,343
Upstate N.Y.	2,280	2,252	54 104	111	62	74 38	49 88	55 241	264	308	241	789
N.Y. City N.J.	189 509	318 1,237	44	45	53	70	77	120	1,113	1,629	90	243
Pa.	989	747	13	15	56	95	67	143	372	394	144	311
E.N. CENTRAL	45	300	93	109	306	304	879	1,868	1,270	1,276	60	63
Ohio	29	21	9	7	118	89	318	616	194	182	8	6
ind.	15	12	12	14	48	44	146	209	113	114	5	11
III. Mich.	1	13	35 27	58 13	79 31	80 55	296 U	720 181	718 175	662 264	15 20	9
Win.	U	249	10	17	30	36	119	142	70	54	12	26 11
W.N. CENTRAL	106	69	35	18	187	127	222	529	315	394	372	252
Minn.	39	5	16	3	25	22	27	29	74	95	19	11
lowa	16	7	2	2	37	23	13	34	43	46	176	90
Mo.	22	36	8	6	79	47	165	447	134	147	16	25
N. Dak. S. Dak.	*	*	1	1	3	5			5 14	3 15	48 91	22 72
Nebr.		4	3	3	15	12	9	10	13	17	3	4
Kans.	28	17	5	2	19	17	17	9	32	71	19	28
S. ATLANTIC	316	450	188	149	461	347	2,498	2,691	2,248	2,347	1,792	1,393
Del.	37	31	3	1	2	5	25	9	20	37	45	72
Md. D.C.	160	300	48	40 13	48	30	412 104	292 75	199 88	266 67	416	284
Va.	28	37	30	35	41	46	289	421	178	167	376	267
W. Va.	10	18	3	1	11	8	1	8	41	53	70	82
N.C.	56	41	19	13	60	58	698	754	330		462	326
S.C. Ga.	3	9	9 16	16	45 115	44 68	265 449	380 513	230 427	212 436	59 205	96 185
Flu.	19	3	53			84	255	239	735		151	70
E.S. CENTRAL	44	44	20	13	128		1,534	2,179	877	922	136	189
Ky.	9	11	3	1	20	36	87	122	160		33	20
Tenn.	16	18	10				562	565	285		45	66
Ala. Miss.	6	6 9	3				375 510	1,061	280 152		56	98
	76	78							1,501		263	526
W.S. CENTRAL Ark.	21	6	21	. 2			1,076	2,126 324	1,501	1,700	14	33
La.	1	4	3				358	684	59	166	13	24
Okla.	7	31		1	23		128	127	125		19	28
Tex.	47	37	18				477	991	1,196		U	441
MOUNTAIN	6	7	38				99	151	389		93	98
Mont. Idaho			6	3			4	4	14		15	33
Wyo.	2	3	3		3				6		21	21
Colo.	-		16					86	53		26	
N. Mex.	1	1	2					5	53		3	3
Ariz. Utah	2	1	5				63	24	159		22	28
Nex.	1	2	2					28	59		3	4
PACIFIC	61	78	242	183	486	426	324	377	3,017	3,041	224	265
Wash.	11	7	16	15	74	71	4	10	155	178	-	6
Oreg.	9	12	15	11	84	75	10	18	64	80		1
Calif.	40	59	201					348	2,646		216	251
Alaska Hawaii	1		3					1	105		8	7
			,	. 1				8	35			
Guam PR.		-		. 1				185	63		31	34
V.I.				. 2								
Amer. Samoa									,	. 3		
C.N.M.I.				- 1			1	2		- 24		

TABLE III. Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 24, 1996, and August 26, 1995 (34th Week)

	H. influe			Hepatitis (vira				Measles		
	invas		A		В		Indi	genous	Imp	orted <sup>†</sup>
Reporting Area	Cum. 1996°	Cum. 1996	Cum. 1996	Cum. 1995	Cum. 1996	Cum. 1995	1996	Cum. 1996	1996	Cum. 1996
NITED STATES	782	780	17,284	18,474	6,085	6,494	5	377	2	36
EW ENGLAND	20	31	220	175	115	158	2	8		6
faine	*	3	13	19	2	.7				
I.H.	8	7	10	8	9	16	U	:	U	1
t. Aass.	10	10	122	71	10	2 57	2	6		5
nass.	1	3	9	20	8	8				
onn.		6	62	53	47	68	U	1	U	
AID. ATLANTIC	124	111	1,017	1,142	907	924		20		5
Ipstate N.Y.	38	29	276	268	235	253		2.0		
I.Y. City	23	26	393	569	419	296		9		3
l.J.	38	13	206	150	157	234		*	*	
a.	25	43	142	155	96	141	*	11		2
N. CENTRAL	119	133	1,472	2,150	651	738		5		4
Ohio	72	68	561	1,208	86	79		2		
nd.	7	17	221	116	110	141				
I.	28	30	307	440	158	194		2	-	1
Aich.	7	16	281	250	253	272	*	-		3
Vis.	5	2	102	136	44	52		1		
V.N. CENTRAL	36	55	1,395	1,284	281	437	-	17	-	3
Aimn.	22	28	86	126	38	36		14	*	
owa	5 5	3 17	249	61 918	62 135	33 314		2		
VIo. N. Dak.	9	17	35	19	135	4		2		
S. Dak.	1	1	40	37	3	2				
Vebr.	1	3	135	33	18	21		-		
Cans.	2	3	181	90	24	27		1		
S. ATLANTIC	182	154	816	741	958	851		6	1	4
Dol.	2		11	8	6	6	*	1		
Md.	46	54	133	140	203	171		2	1	
D.C.	6	-	22	18	27	15		-		
Va.	6	21	108	131	96	75	*	-	*	1
W. Va.	6	6	12	16	17 231	35 194		3		
N.C. S.C.	22	24	99 42	77 31	54	33	*	3		
Ge.	73	43	87	50	8	62				
Fla.	18	5	302	270	316	260				
E.S. CENTRAL	21	8	954	1,191	521	594				
Ky.	4	2	20	33	36	51				
Tenn.	8	-	649	993	298	467		-		
Ala.	8	5	130	59	41	76				
Miss.	1	1	155	106	146	-	U		U	
W.S. CENTRAL	32	49	3,605	2,308	817	777	1	25		
Ark.		5	338	333	51	39				
La.	3	1	106	74	77	134	-		*	
Okta.	26	20	1,500	601	59 630	104 500	1	26		
Tex.	3	23	1,661	1,300				25	,	
MOUNTAIN	78	86	2,763	2,750	700	562	2	150		
Ment.	i	2	81	72	7 69	19 68		1		
ldaho Wyo.	35	5	150 26	237 83	30	17	1	1	-	
Colo.	11	11	294	344	88	82		Ä		
N. Mex.	9	12	277	571	233	210	1	14		
Ariz.	9	21	1,129	798	173	85		8		
Utah	7	9	640	498	69	46	-	117		
Nev.	6	26	166	147	31	35		5		
PACIFIC	170	153	5,022	6,733	1,135	1,453		146	1	
Wash.	2	8	328	539	63	122		45		
Oreg.	22	21	584	1,730	45	88		4		
Calif.	143	120	4,028	4,321	1,010	1,221	*	33		
Alaska	1		31	28	9	10		63	-	
Flavvaii	2	4	51	115	8	12		1	1	
Guam	*	-	2	6		4	U		U	
P.R.	1	3	72	69	254	413		6	Ü	
V.I. Amer. Samoa				6 5		12	U		Ü	

N: Not notifiable U: Unavailable

-: no reported cases

\*Of 182 cases among children aged <5 years, serotype was reported for 39 and of those, 10 were type b.

<sup>†</sup>For imported measles, cases include only those resulting from importation from other countries.

TABLE III. (Cont'd.) Cases of selected notifiable diseases preventable by vaccination, United States, weeks ending August 24, 1996, and August 26, 1995 (34th Week)

	Measles (Rub	1	Mumpi			Pertussi		Rubella			
Reporting Area	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995	1996	Cum. 1996	Cum. 1995
UNITED STATES	413	262	4	420	574	198	2,649	2,390	1	189	104
NEW ENGLAND	14	8	-		11	29	529	320		24	44
Maine N.H.	:		Ü	-	4	ú	18 44	19	Ú	*	1
/t.	2		-			2	26	48		2	
Mass. R.I.	11	5	~		2	19	428	216		20	7
Conn.	1	1	Ü		3	8	8	13	Ü	2	36
MID. ATLANTIC	25	12		57	87	9	197	197		8	12
Jpstate N.Y.	*	1		18	22	9	108	93		4	3
N.Y. City N.J.	12	5	-	13	11		22 5	27		2 2	7 2
Pa.	13			24	41		62	63		-	-
E.N. CENTRAL	9	14	2	77	96	19	271	282		3	3
Ohio	2	1		33	29	9	133	82			
Ind.	3	2	1	6 18	7 29	5	26 81	18 54		1	-
Mich.	3	5	1	19	31	2	26	51		2	3
Wis.	1	6		1	-	-	5	77			*
W.N. CENTRAL Minn.	19 16	2	-	9	34	31	165	128		1	-
lowa			-	1	8	30	128 5	42		1	
Mo.	2	1	-	2	20		20	39	*		
N. Dak. S. Dak.	-		-	2		-	1 3	6			
Nebr.					4		4	8			
Kans.	1	1		1		-	4	19			
S. ATLANTIC Del.	14	11		73	85	7	328	179		91	9
Md.	4	1	-	20	27	3	11 125	9 26			1
D.C.	-				-			4		1	
Va. W. Va.	2	-		10	16		26	10	*	2	
N.C.	4			17	16	2	57	81		77	1
S.C. Ga.	2	2	-	5 2	7	1	24	16		1	-
Fla.	1	8	-	19	13	1	17 66	13		10	7
E.S. CENTRAL	-			19	7		63	198		2	1
Ky.	-	-			*	-	26	15		-	
Tenn. Ala.	-	-	-	1 3	4		17 12	150 32		2	1
Miss.			U	15	3	U	8	1	N	Ñ	N
W.S. CENTRAL	27	21	-	18	39	6	69	193		2	7
Ark	1	18			6		4	29		:	
La. Okla.		10		11	8		6	11	:	1	
Tex.	27	1		7	25	6	51	134		1	7
MOUNTAIN	155	68	-	22	25	15	263	436		6	4
Mont. Idaho	1				1 2	6	15 91	3 85		2	
Wyo.	1				-		3	1	2	-	
Colo. N. Mex.	14	26 31	Ñ	2 N	N	3	67	64	*	2	-
Ariz.	8	10	14	1	2	3	39 15	149		1	3
Utah	119		-	2	11	-	11	18		-	1
Nev.	5	1	-	17	9	~	22	47		1	
PACIFIC Wash.	150 45	126 19	2	145 18	190	82 50	764 287	457	1	52	24
Oreg.	4	1		-		90	287	113	1	2	1
Calif.	35	104	2	105	162	29	428	276		46	18
Alaska Hawaii	63	2	-	20	12	3	18	38	-	3	5
Guam			U	5	3	U	1	2	U		1
P.R.	6	3	-	1	2		1	1			
V.I.			U		3	U		-	U	-	
Amer. Samos C.N.M.I.			U		-	U			U		

# TABLE IV. Deaths in 121 U.S. cities,\* week ending August 24, 1996 (34th Week)

		All Causes, By Age (Years)						PB4	PM <sup>1</sup>	All Causes, By Age (Years)						PB4 <sup>1</sup>
Reporting Area	All Age	J	>66	45-64	25-44	1-24	<1	Total	Reporting Area	All Ages	>65	45-64	25-44	1-24	<1	Tota
WEW ENGLAND	53		393	82	43	12	9	28	S. ATLANTIC	1,269	815	258	133	35	25	56
loston, Mass.	12		87	19	17	1	1	2	Atlanta, Ga.	189	126	34	19	9	1	-
Bridgeport, Conn.		6	27	6	2	-	1	1.1	Baltimore, Md.	185	107	38	34	4	2	17
ambridge, Mass.		5	22	3		-		3	Charlotte, N.C.	77	49	20	4	1	3	
all River, Mass.		6	23	1	1	1	1	-	Jacksonville, Fla.	120	83 74	27 26	17	2	2	1
lartford, Conn.		7	39 17	13	2	2	1	3 2	Miami, Fla. Norfolk, Va.	121	39	10	6	4	4	
owell, Mass. ynn, Mass.		9	15	2	2		-	1	Richmond, Va.	73	45	13	12	1	-	
New Bedford, Mas		9	6	2	1	-		i	Savannah, Ga.	64	40	17	5	1	1	
lew Haven, Conn.		8	21	9	3	4	1	2	St. Petersburg, Fla.	54	43	8	3			
rovidence, R.I.	5	5	42	7	5	1		3	Tampa, Fla.	174	128	27	12	3	4	2
Somerville, Mass.		6	3	3		-		*	Washington, D.C.	136	74	34	15	6	7	
Springfield, Mass.		1	34	9	4	1	3	5	Wilmington, Del.	13	7	4		1		
Waterbury, Conn.		5	18	4	3	-	-	1.1	E.S. CENTRAL	798	490	182	70	29	24	3
Norcester, Mass.	4	19	39	3	3	2	2	4	Birmingham, Ala.	110	64	30	6	6	1	-
MID. ATLANTIC	2,25	14	1,506	457	203	55	33	101	Chattanooga, Tenn.	60	31	15	9	2	3	
Albany, N.Y.	4	15	36	6	2	-	1	2	Chattanooga, Tenn. Knoxville, Tenn.	82	53	18	6	5		
Allentown, Pa.		4	4			*			Lexington, Ky.	142	91	32	11	2	- 6	
Buffalo, N.Y.		19	65	16	4	4	-	1	Memphis, Tenn.	164	102	35	19	5	3	
Camden, N.J.		14	13	6	2	2	1	*	Mobile, Ala.	84	51	16	8	4	2	
Elizabeth, N.J. Erie, Pa.§		11	30	8	3		-	2	Montgomery, Ala. Nashville, Tenn.	127	78	30	10	5	4	
Jersey City, N.J.		18	34	7	5		2			-		-	-			
New York City, N.Y			786	233	115	22	12	41	W.S. CENTRAL	1,411	900	292	140	43	36	8
Newark, N.J.		19	18	18	9	4		5	Austin, Tex.	46	22	11	8	2	3	
aterson, N.J.		18	13	1	3	*	1	1	Baton Rouge, La.	64 58	46	14	7	1	1	
Philadelphia, Pa.		99	236	98	38	19	8	24	Corpus Christi, Tex. Dallas, Tex.	193	110		24	3	6	
Pittsburgh, Pa.5		15	34	6	3		2	3	El Paso, Tex.	81	64		5	2	1	
Reading, Pa.		10	6	3	1			2	Ft. Worth, Tex.	105	74		10	6	1	
Rochester, N.Y. Schenectedy, N.Y.		22	76 17	17	8 2	2	4	5 2	Houston, Tex.	380	231	89	39	13	8	4
Scranton, Pa.5		28	22		1			4	Little Rock, Ark.	56	32	12	5	3	4	
Syracuse, N.Y.		78	62		1		2	9	New Orleans, La.	95	44		16	6	5	
Trenton, N.J.		16	12		3		-	2	San Antonio, Tex.	174	120		13	3	4	
Utica, N.Y.		15	10	4	1		-		Shreveport, La.	50	35		4	1		
Yonkers, N.Y.		25	18	3	2	2		2	Tulsa, Okla.	109	82		6	2	3	
E.N. CENTRAL	1,9	87	1,302	409	157	64	55	96	MOUNTAIN	859	549		80	40	26	6
Akron, Ohio		49	39		1	1	3		Albuquerque, N.M. Colo. Springs, Colo	99	68		11	5	1	
Canton, Ohio		32	26		2			2	Denver, Colo.	85	53		9	2	6	
Chicago, III.		55	196		50	16	11		Las Vegas, Nev.	151	85	42	15	8	1	
Cincinnati, Ohio Cleveland, Ohio		62 43	43		16	3	4	5	Ogden, Utah	25	19		1	-	1	
Columbus, Ohio		67	99		12	8	7	16	Phoenix, Ariz.	215	124		18	14	10	
Dayton, Ohio		14	85		5	2	3	13	Pueblo, Colo.	23	21		1	-	-	
Detroit, Mich.	1	82	102			8	3	1	Selt Lake City, Utal		64		8	8	4 2	
Evansville, Ind.		42	31					2	Tucson, Ariz.	116	86	16	11	2	2	
Fort Wayne, Ind.		62	46			1	2	4	PACIFIC	1,641	1,090	286	166	61	37	13
Gary, Ind.		13	51			1	5	3	Berkeley, Calif.	9	7		2		-	
Grand Rapids, Mit Indianapolis, Ind.		29	158			8	7	9	Fresno, Calif.	104	71		10	5	1	
Madison, Wis.		57	40			2			Glendale, Calif.	12	11		7	1		
Milwaukee, Wis.		25	87			3		. 7	Honolulu, Hawaii Long Beach, Calif.	74 62			4	5	1	
Peoria, III.		42	24			3	2	2	Los Angeles, Calif.		197	59	40	14	7	
Rockford, III.		41	32			1	1		Pasadena, Calif.	25			2		1	
South Bend, Ind.		55	37			1	1		Portland, Oreg.	117	85	18	9	3	2	
Toledo, Ohio		05	77			4			Sacramento, Calif.	148	109	23	12	6	2	
Youngstown, Ohio	)	49	33	9	5	1	1	1	San Diego, Calif.	163			14	11	9	
W.N. CENTRAL	7	18	510	113	45	22	16	35	San Francisco, Cali				21	1	4	
Des Moines, Iowa		79	56	15			1		San Jose, Calif.	148			10	4	5	
Duluth, Minn.		17	15			1			Santa Cruz, Calif.	29	2	4	2	1	1	
Kansas City, Kans		25	13			1		1	Seattle, Wash.	148 53			20	4	1	
Kansas City, Mo.	1	07	- 00			1	3	2	Spokane, Wash.	88			11	3	3	
Lincoln, Nebr.		40						2	Tacoma, Wash.							
Minneapolis, Min	n. 1	46						9	TOTAL	11,476	7,558	5 2,243	1,037	361	261	6
Omaha, Nebr.		75				3		8 4								
St. Louis, Mo. St. Paul, Minn.	1	48				1		5								
Wichita, Kans.		70					3	1								

U: Unavailable :: no reported cases

"Mortality data in this table are voluntarily reported from 121 cities in the United States, most of which have populations of 100,000 or more. A death is reported by the place of its occurrence and by the week that the death certificate was filed. Fetal deaths are not included.

"Pneumonia and influenza.
"Bacause of changes in reporting methods in these 3 Pennsylvania cities, these numbers are partial counts for the current week. Complete counts will be available in 4 to 6 weeks.

Total includes unknown ages.

	Total resident population		Botulis	m		
Area	(in thousands)	AIDS*	Foodborne	Infant	Brucellosis	Chancroid
United States	262,755	71,547	24	54	98	606
New England	13,312	3,608	1	-	1	7
Maine	1,241	130	-	_	-	-
N.H.	1,148	112	_	_	-	_
Vt.	585	44	-	-	-	de
Mass.	6,074	1,447	1	-	-	7
R.I.	990	223	-	-	-	-
Conn.	3,275	1,652	-	-	1	-
Mid. Atlantic	38,153	19,185	-	16	2	340
N.Y. (excl. NYC)	10,824	2,364	-	1		2
N.Y.C.	7,312	10,035	-	-	1	334
N.J.	7,945	4,409	-	7	-	4
Pa.	12,072	2,377	-	8	1	-
E.N. Central	43,456	5,410	-	5	12	29
Ohio	11,151	1,110	-	2	-	5
ind.	5,803	529	-	-	8	21
III.	11,830 9,549	2,220 1,201	-	1	3	21
Mich.	5,123	350	_	2	1	3
Wis.			1	_	4	2
W.N. Central	18,348	1,734 369		_	2	
Minn.	4,610 2,842	116	-	-	2	
lowa Mo.	5,324	791	_	-	4	_
N. Dak.	641	5	_	-	_	_
S. Dak.	729	19	-	-	-	-
Nebr.	1,637	114	-	-	-	_
Kans.	2,565	320	1	-	-	2
S. Atlantic	46,995	17.983	1	4	9	47
Del.	717	316	-	1	-	-
Md.	5,042	2,575	-	1	2	-
D.C.	554	1,029	-	-	-	-
Va.	6,618	1,610	1	2	-	2
W. Va.	1,828	127	-	-	-	1
N.C.	7,195	1,000	-	-	3	18
S.C.	3,673	976	-	-	1	2
Ga.	7,201	2,291		-	2	24
Fla.	14,166	8,059		1	3	9
E.S. Central	16,066	2,279	-	i		
Ky. Tenn.	3,860 5,256	298 897		-	-	2
Ala.	4,253	642	_	-		7
Miss.	2,697	442	_	_	3	_
W.S. Central	28.828	6,136	-	1	24	156
Ark.	2,484	277	-	-	4	1
La.	4,342	1,087	-	1	-	129
Okla.	3,278	295	-	-	1	-
Tex.	18,724	4,477	-	-	19	26
Mountain	15,645	2,263	7	2	13	4
Mont.	870	25	-	-	1	-
Idaho	1,163	49	4	-	-	-
Wyo.	480	17	-	-	2	-
Colo.	3,747	673	1	-	1	-
N. Mex.	1,685	164	-	-	4	-
Ariz.	4,218	678	2	=	5	2
Utah	1,951	164	-	2	-	2
Nev.	1,530	493		-		
Pacific	41,951	12,813	14	25	30	12
Wash.	5,431	892 459	6	-	1	5
Oreg.	3,141		3	23	29	7
Calif.	31,589 604	11,134	5	23	29	,
Alaska Hawaii	1 187	259	9	2	-	
Guam	133		-	-		
P.R.	3,522	2.594	-	-	-	1
V.I.	102	39	_	-		2
C.N.M.I.	43		-		-	NA

\*Totals reported to Division of HIV/AIDS Prevention, National Center for HIV, STD, and TB Prevention (NCHSTP), through December 31, 1995. Total includes 136 cases with unknown state of residence. \*\*Cases updated through Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of March 1, 1996.

			Escherichia	coli O157:H7		Haemophilu influenzas,
Area	Chlamydia*	Cholera	NETSS1	PHLIS <sup>1</sup>	Genomhea*	Invasive
United States	477,638	23	2,139	1,531	392,848	1,180
New England	18,248	-	243	139	7,539	46
Maine	1,144		65	-	94	3
N.H.	898	-	NA	21	118	13
Vt.	462	rde .	20	22	69	2
Mass.	7,402	100	118	96	2,658	16
R.I. Conn.	1,902 6,440	-	3	-	545	5
Mid. Atlantic	53,703	4			4,055	7
			242	209	44,813	177
N.Y. (excl. NYC) N.Y.C.	NN 26,686	1	100	114	9,493 16,499	45 36
N.J.	4,056	1	66	51	5,783	32
Pa.	22,961	1	NN	44	13,038	64
E.N. Central	93,492	2	372	358	77,547	190
Ohio	29,124	-	107	59	23,176	99
Ind.	9,102	1	64	42	8,880	22
III.	24,645	1	126	90	21,747	48
Mich.	21,666	-	75	49	18,220	18
Wis.	8,955		NN	118	5,524	3
W.N. Central	34,055	1	415	278	20,106	94
Minn.	6.032	1	190	186	2,852	56
lowa	5,089	-	66	52	1,723	3
Mo.	12,110	_	48	-	11,326	28
N. Dak.	1,324	-	8	8	38	-
S. Dak.	1,313	-	23	12	237	1
Nebr.	2,873	-	42	-	1,133	3
Kans.	5,314	**	29	20	2,797	3
S. Atlantic	85,575	2	135	83	110,052	236
Del.	2,701	1	5	2	2,201	-
Md.	8,740	-	NN	8	12,984	74
D.C.	1,665	-	-	-	5,687	-
Va.	12,285	-	NN	32	10,340	28
W. Va.	2,326	-	NN	3	860	11
N.C.	15,780	-	45	29	23,961	34
S.C.	8,591	-	10	5	12,120	3
Ga.	11,193	-	29	-	21,025	71
Fla.	22,294	1	46	4	20,874	15
E.S. Central	24,158	-	38	38	42,837	12
Ky.	6,904	-	19	15	4,751	5
Tenn. Als.	13,154	-	NN	23	13,892	-
Miss.	3,188	-	16	-	14,683	6
W.S. Central	912	-	3		9,511	1
Ark.	59,483	2	69	18	50,800	80
La.	680	-	15	7	5,630	6
Okla.	9,111 5,065	-	NN 16	3 8	9,292	1 31
Tex.	44,627	2	38	-	5,077 30,801	42
Mountain	29.361	3	278	122	9,509	122
Mont.	1,198		60	122		
Idaho	1,739	_	63	35	65 149	1 6
Wyo.	703	-	NN	7	51	11
Colo.	6,650	1	93	37	2,803	16
N. Mex.	4,285	1	10	5	1,054	16
Ariz.	10,061	1	NN	26	3,844	30
Utah	1,676	-	29	_	306	12
Nev.	3,049	-	23	12	1,237	30
Pacific	79,563	9	347	286	29,645	223
Wash.	9,462	-	140	132	2,765	11
Oreg.	5,465	-	89	61	854	28
Calif.	62,501	9	118	77	24,803	178
Alaska	NN	-	NN	1	660	2
Hawaii	2,135	-	NN	15	563	4
Guam	461	-	1	-	90	_
P.R.	2,305	-	43	NA	618	3
V.I.	17	-	-	NA	31	-
C.N.M.I.	NA	9	NN	-	NA.	11
American Samoa	NA.	NA	NA	NA.	NA.	NA NA

\*Cases updated through Division of Sexuelly Helicities.
as of March 1, 1996.
National Electronic Telecommunications System for Surveillance.
Public Health Laboratory Information System.

NA: Not Available NN: Not Notifiable

	Hansen		Hepatitis				
Area	disease (leprosy)	A	В	C/non-A, non-B	Legionel- losis	Lyme	Malaris
Jnited States	144	31,582	10,805	4,576	1,241	11,700	1,419
lew England	7	333	252	142	41	2,164	52
Maine	-	30	12	-	6	45	7
N.H.		13	23	14	2	28	2
Vt.	-	8	7	14	2	9	1
Mass.	7	161	114	106	24	189	21
R.I.	-	35	10	8	7	345	4
Conn.	den	86	86	-	NN	1,548	17
Wid. Atlantic	14	2,091	1,599	590	226	7,703	402
N.Y. (excl. NYC)	1	523	414	341	65	3,983	75
N.Y.C.	12	1,008	524	1	6	455	222
N.J.	1	312	368	189	33	1,703	73
Pa.	-	248	293	59	122	1,562	32 166
E.N. Central	3	3,160	1,130	358	341	441	
Ohio	1	1,760	116	15 14	151 81	30 19	13
Ind.	1	663	293	86	36	18	78
Mich.		364	398	243	35	5	26
Wis.		184	82	2.73	38	369	23
W.N. Central	2	1,992	675	91	121	306	31
Minn.	_	198	93	4	49	208	12
lowa	_	107	46	15	21	16	1
Mo.	1	1,338	437	23	19	53	
N. Dak.	_	23	5	7	3	-	
S. Dak.	-	99	2	1	3	-	
Nebr.	1	65	39	23	18	6	4
Kans.	-	162	53	18	8	23	
S. Atlantic	4	1,434	1,599	316	199	726	27
Del.	-	12	9	-	2	56	
Md.	2	221	262	7	29	454	6:
D.C.	-	26	21	-	5	3	1
Va.	-	238	118	21	28	55	5
W. Va.	-	24 111	53 311	64	4 34	26 84	2
N.C. S.C.	1	46	56	21	30	17	2
Ga.	-	84	103	28	19	14	4
Fla.	1	672	666	131	48	17	7
E.S. Central	_	2,312	830	1,020	56	73	2
Ky.	_	44	69	34	10	16	
Tenn.	-	1,951	647	983	26	28	1
Ala.	-	93	114	3	8	12	1
Miss.	-	224	NA	NA	12	17	
W.S. Central	36	5,287	1,712	631	32	160	10
Ark.	1	663	83	8	8	11	
La.	1	196	243	222	3	9	
Okla.	-	1,427	173	54	8	63	
Tex.	36	3,001	1,213	347	13	77	8
Mountain	-	4,346	879	519	116	13	6
Mont.	-	173	24	18	4	-	
Idaho	-	353	102	58	3	7	
Wyo.	-	110	33	223	12	4	
Colo.	-	509	138	69 53	42	1	2
N. Mex. Ariz.	-	1,363	321 121	59	6 13	1	1
Utah	_	696	75	13	16	1	
Nev.	-	334	65	26	20	6	
Pacific	76	10,627	2,129	909	109	114	25
Wash.	3	937	2,129	234	22	10	2
Oreg.	1	2,723	129	37		20	- 1
Calif.	52	6,751	1,729	511	82	84	23
Alaska	1	50	13	3	-	-	-
Hawaii	19	166	32	124	5	-	
Guam	7	10	5	6	1	-	
P.R.	-	120	689	216	-	-	
V.I.	-	9	16	-	-	-	
C.N.M.I.	6	24	22	5	-	-	
American Samoa	NA	NA	NA	NA	NA	NA	

NA: Not Available NN: Not Notifiable

	Mea		Meningo- coccal				Polio- myelitis,
Area	Indigenous	Imported*	disease	Mumps	Pertussis	Plague	paralytic
United States	281	28	3,243	906	5,137	9	2
New England	10	3	165	13	731	-	-
Maine	-	-	17	4	47	-	-
N.H.	-	-	29	1	70	-	-
W.	-	-	11	-	81	-	-
Mass.	3 6	2	51 7	3	492	-	-
R.I. Conn.	1	1	50	4	34	-	-
Mid. Atlantic	9	5	372	134	469	-	1
N.Y. (excl. NYC)	1	-	106	33	253	-	-
N.Y.C.	2	3	54	17	67	-	-
N.J.	6	2	74	21	20	-	-
Pa.	-	-	138	63	129	-	1
E.N. Central	11	4	419	172	667	-	-
Ohio	1	1	115	54	175	-	-
Ind.	-	2	65	10	76	-	-
III. Mich.	4	1	110 75	48 60	155 103	-	_
Wis.	6	-	54	-	158	-	-
W.N. Central	12	-	201	52	360	-	1
Minn.	9	-	31	11	238	-	-
lowa	-	-	31	11	11	-	-
Mo.	2	-	76	25	63	-	-
N. Dak.	**	-	2	1	8	-	1
S. Dak.	-	-	11	-	12	-	-
Nebr.	ī	_	22 28	4	14 23	-	-
Kans.	14	5	601	163	288	_	_
S. Atlantic Del.	14		6	103	10		_
Md.	_	1	42	41	49	-	
D.C.	-	-	8	-	8	-	-
Va.	-	-	64	28	31	-	-
W. Va.	-	-	10	-	1	-	-
N.C.	-	-	86	42	137 28	-	-
S.C. Ga.	4	-	59 124	13 11	30	-	-
Fla.	10	4	202	28	94		-
E.S. Central	-	-	244	20	277	-	-
Ky.	-	_	51	-	27	-	-
Tenn.	-	-	106	5	209	-	-
Ala.	-	-	49	5	38	NN	-
Miss.	-	-	38	10	3	-	-
W.S. Central	31	3	404	66	342	-	-
Ark.	2	-	39	7	59	-	-
La. Okla.	17	1	63 49	15	22	-	-
Tex.	12	2	253	43	217	-	_
Mountain	68	2	218	33	743	5	-
Mont.	-	-	4	1	9	-	-
Idaho	1	1	21	4	116	-	-
Wyo.	-	-	8	-	1	-	-
Colo.	26	-	49	3	149	-	-
N. Mex.	30	1	36	NN	148	4	-
Ariz. Utah	10	-	63 18	11	164 37	1	-
Nev.	1	-	19	12	119	-	_
Pacific	126	6	619	253	1,151	4	-
Wash.	20	-	126	16	491		_
Oreg.		1	117	NN	67	1	-
Calif.	106	3	356	211	531	3	-
Alaska	-	-	15	12	1	-	-
Hawaii		2	5	14	61	-	-
Guam	-	-	3	4	2	-	-
P.R.	3	-	24	3	3	-	-
C.N.M.I.	-	-	-	3	-	-	-
American Samos	NA NA	NA	NA	NA	NA	NA	NA

<sup>\*</sup>Imported cases include only those resulting from importation from other countries.

NA: Not Available

NN: Not Notifiable
pending review by external panel.

					Ru	mella		
A	Paitta-	Animal	Human	RMSF*	Rubella	Cong. syndrome	Salmonel- losis	Shigel- losis
Area	cosis		-					
United States	64	7,811	5	590	128	6	45,970	32,080 664
New England	1	1,512	1	2	52	-	3,355 183	25
Maine	1	101 152	-	-	1	-	188	71
N.H. Vt.	-	179	-	_		_	102	11
Mass.	_	401	_	1	11		1,862	324
R.I.	_	317	_	_	-	-	221	70
Conn.	-	362	1	1	40	-	799	163
Mid. Atlantic	12	1.923	-	43	16	1	8,157	3,531
N.Y. (excl. NYC)	5	1,157	-	12	5	-	1,912	985
N.Y.C.	-	-	-	6	8	1	2,159	845
N.J.	1	326	-	15	3	-	1,734	1,038
Pa.	6	440	-	10	-	-	2,352	663
E.N. Central		113	-	37	4	-	6,203	3,299
Ohio	1	12	-	17	-	-	1,545	598
Ind.	2	24	-	9	-	-	701	411
81.	-	16	-	10	-	-	2,087	1,539
Mich.	2	43	-	1	4	-	950	487
Wis.	3	18	-	-	-	-	920	264
W.N. Central	-	396	-	41	1	1	2,662	2,560
Minn.	-	37	-	-	-	-	737	197
lows	-	141	-	-	-	7	433	350
Mo.	-	30	-	30	-	1	577 83	1,138
N. Dak.	-	32	-	1	-	-	108	200
S. Dak.	-	105	-	6	-	-	301	227
Nebr.	-	46	-	4	1	-	363	302
Kans. S. Atlantic	15	2,254	1	290	14		9,961	5.898
Del.		96	-	3	14	-	208	247
Md.	2	439	_	36	1	_	1,215	639
D.C.	-	11	_	36	-	_	154	197
Va.	1	459	-	34	-	-	1,358	413
W. Va.	_	116	-	4	-	-	189	58
N.C.	3	486	-	150	1	-	1,176	1,00
S.C.	3	125	-	37	-	-	633	25
Ga.	5	294	-	9	-	-	1,662	1,35
Fla.	1	248	1	7	12	-	3,386	1,72
E.S. Central	1	285	-	83	1	-	2,022	1,57
Ky.	-	28	-	16	-	-	433	33:
Tenn.	1	98	-	32	1	-	454	40
Ala.	-	150	-	3	-	-	581	51
Miss.	-	9	-	32	NN	-	554	33
W.S. Central	-	728	-	88		-	3,743	3,93
Ark.	-	52	-	31	-	-	338	17
La.	-	54	-	2		-	590 452	48 25
Okia.	-	32 590	-	47	8	-	2,363	3,01
Tex.	-		-			-	2,198	4,53
Mountain	4	192	-	16	5	-		4,53
Mont.	_	46	-	5	-	-	103 85	12
ldaho Wyo.	-	3	2	5	-	_	37	1
Colo.	2	16	-	5	1	-	594	52
N. Mex.	-	6	_	-	-	-	342	1,08
Ariz.	-	57	-	_	3	-	519	1,61
Utah	3	15	-	1	1	-	280	76
Nev.	1	17	-	-	-	-	238	12
Pacific	23	408	3	2	27	4	7,729	6,08
Wash.	7	15	1	1	1	-	691	42
Oreg.	3	4	-	1	_	-	344	16
Calif.	13	382	2	-	21	4	6,343	5,37
Alaska	-	7	-	NN	-	-	48	2
Hawaii	-	-	-	-	5	-	303	10
Guam	-	-	-	-	1	-	40	1
P.R.	-	39	-	-	-	-	770	5
V.I.	-	-	-	-	-	-	9	
C.N.M.I.	-	-	-	-	-		42	4
American Samo	a NA	NA	NA.	NA	NA.	NA	NA.	N

\*Rocky Mountain spotted fever.

NA: Not Available NN: Not Notifiable

Area	Syphilis*				Toxic-			
	Primary & secondary	Cong. (<1 yr.)	All	Tetanus	shock syndrome	Trich- inosis	Tuber- culosis <sup>†</sup>	Typhoid fever
United States	16,500	1,463	68,953	41	191	29	22,860	369
New England	161	9	905	-	7	2	574	35
Maine	2	-	4	-	1	-	28	-
N.H.	-	-	32	-	-	-	23	1
Vt.	-	-	-	-	2	-	4	-
Mass.	69	2	508	-	-	1	330	31
R.L.	4	-	90	-	4	-	50	1
Conn.	86	7	271	-	-	1	139	2
Mid. Atlantic	865	415	12,230	4	35	2	4,588	120
N.Y. (excl. NYC)	85	45	999	2	20	-	621	12
N.Y.C.	364	191	7,791	-	4	1	2,445	66
N.J.	188	109	1,490	-	-	1	848	27
Pa.	248	70	1,950	2	11	-	674	15
E.N. Central	2,732	202	8,257	8	44	3	2,044	41
Ohio	896	44	1,944	2	8	-	280	5
Ind.	321	10	88C	1	3	2	199	3
61.	1,026	121	3,649	4	11	-	1,024	25
Mich.	304	21	1,204	1	17	-	424	4
Wis.	186	6	580	-	5	1	117	4
W.N. Centrel	738	48	1,822		34		618	9
Minn.	45	-	187	3	6	-	156	5
lowa	48	-	171	3	5	8	72 244	3
Mo.	584	46	1,271	3	14	-	5	3
N. Dak. S. Dak.	-	-	7	-	1	-	28	_
Nebr.	14	-	35	-	5	-	24	-
Kans.	47	2	151	2	2	-	89	1
S. Atlantic	4,212	297	15,862	6	24	-	4.113	43
Del.	19	1	129	-	-		56	1
Md.	479	14	1,471		2	-	370	6
D.C.	112	18	727	-	-	-	102	-
Va.	600	22	1,587	-	3	-	359	10
W. Va.	16	-	66	1	-	-	71	3
N.C.	1,132	25	3,058	-	7	-	519	5
S.C.	570	49	1,676	-	4	-	334	-
Ga.	901	53	3,678	1	1	-	746	-
Fla.	383	115	3,470	4	7	-	1,556	18
E.S. Central	3,665	133	9,298	1	7	-	1,483	2
Ky.	185	8	502	-	2	-	327	
Tenn.	906	33	2,608	1	5	-	465	1
Ala.	612	10	1,639	-	-	-	420	1
Miss.	1,952	82	4,549	-	NIN	-	271	
W.S. Central	3,273	228	13,423	5	1	***	3,353	24
Ark.	495	4	1,245	-	1	-	271	
La.	1,024	17	3,675	2	-	-	476	
Okla.	197	13	585	-	-	-	237	2
Tex.	1,557	194	7,918	3	-		2,369	
Mountain	204	12	1,129	3	10	11	702	
Mont.	4	-	13	-	-	9	21	
Idaho	-	-	12	-	2	2	14	
Wyo.	1	-	2	-	3		96	
Colo. N. Mex.	100	2	304 138	2	1	-	85	
	46	8	415	_	-	_	319	
Ariz. Uteh	40		50	_	3	_	48	
Nev.	36	2	195	1	-	-	115	
Pacific	640	119	6.027	6	29	3	5,386	9
Wash.	17	2	212	-	1	-	278	
Oreg.	5	2	67	_	-	-	156	
Calif.	616	117	5,703	5	28	3	4,677	7
Alaska	2	117	20	-	40	-	81	
Hawaii	-	_	25	1	-	-	193	
Guam	-	-	6	1	-	-	NA	
P.R.	285	3	1,608	-	-	-	263	
V.L.	2	-	19	-	-	-	4	
C.N.M.I.	NA	NA	NA	1	-	-	37	9
American San		NA	NA	NA.	NA	NA	NA	N.

\*Cases updated through Division of Sexually Transmitted Diseases Prevention, NCHSTP, as of March 1, 1996.

\*Cases updated through Division of Tuberculosis Elimination, NCHSTP, as of May 29, 1996.

NA: Not Available NN: Not Notifiable

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